



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,089	12/29/2000	David J. Evans	NC30310	4021

26343 7590 04/16/2004

STEVEN A. SHAW
NOKIA, INC.
6000 CONNECTION DRIVE
MD 1-4-755
IRVING, TX 75039

EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,089

Applicant(s)

EVANS, DAVID J.

Examiner

Bob A. Phunkulh

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 3 is objected to because of the following informalities: please insert period "." at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Cam et al. (US 5,875,192), hereinafter Cam.

Regarding claim 1, Cam discloses a system for detection of error conditions when passing a cell stream at a particular transmission rate from a first location to a second location over multiple links, the system comprising:

a first unit at the first location coupled to one end of each of a plurality of low capacity data links for receiving the cell stream and inverse multiplexing the cell stream into frames that are transmitted over at least two trained data links selected from the plurality of low capacity data links that are set to active status (first IMA assembly having an input coupled to an incoming cell stream from a first ATM layer device, see col. 2 lines 63 to col. 3 line 4); and

Art Unit: 2661

a second unit at the second location coupled to the other end of each of the plurality of low capacity data links for receiving the frames from each of the active trained data links and multiplexing the frame to produce the cell stream, wherein the first unit inserts at least one detection cell into each frame prior to transmission and the second unit analyzes the received detection cell to determine if an error condition exists (second IMA assembly having an output coupled to a second ATM layer device, a plurality of links coupling the first IMA assembly to the second IAM assembly, see col. 3 lines 1-24 and figure 2).

Regarding claim 4, Cam discloses a method for enhancing error detection in a data stream transmitted from a first unit to a second unit, the method comprising:

establishing a desired cell size for a detection cell and a frequency of insertion into the data stream (col. 3 lines 3-8);

determining a known signal that will be part of the detection cell;

inserting the detection cell with the known signal into the data stream being transmitted from the first unit to the second unit (col. 3 lines 8-11); and

analyzing the received detection cell at the second unit to determine if an error condition exists (see col. 3 lines 16-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2661

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cam in view of Sathe et al. (US 5617417), hereinafter Sathe.

Regarding claim 2, Cam fails to explicitly disclose at least one data link selected from the plurality of low capacity data links that is trained and set to idle status, wherein the first unit and the second unit switch to use the trained idle data link to replace any one of the active trained data links that has failed and wherein the status of the idle data link is changed to active, thereby avoiding system down time due to line failure.

Sathe, on the other hand, teaches at least one data link selected from the plurality of low capacity data links that is trained and set to idle status, wherein the first unit and the second unit switch to use the trained idle data link to replace any one of the active trained data links that has failed and wherein the status of the idle data link is changed to active, thereby avoiding system down time due to line failure (see col. 8 lines 8-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to include the teaching of Sathe in the system taught by Cam for providing fault tolerance communication links.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cam in view of Counterman (US 6,222,858).

Art Unit: 2661

Cam fails to explicitly disclose the trained data links operate at an optimal rate.

Counterman, on the other hand, teaches it is well known in the art (see col. 4 lines 16-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to implement the teaching of Counterman in the system taught by Cam in order to comply with the known and widely accepted rate of communication.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

Art Unit: 2661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703**. The fax phone number for this group is **(703) 872-9314**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh



TC 2600

Art Unit 2661

April 13, 2004